

SOE remediation packet

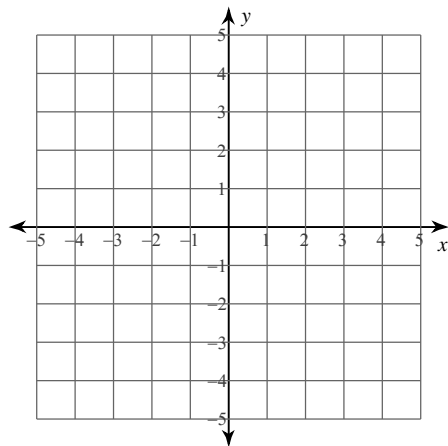
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Date _____ Period _____

Solve each system by graphing.

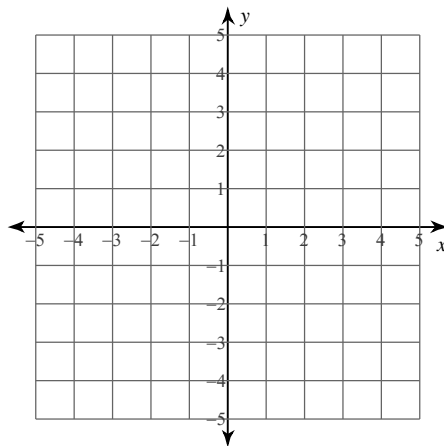
$$1) \ y = -\frac{1}{4}x + 2$$

$$y = x - 3$$



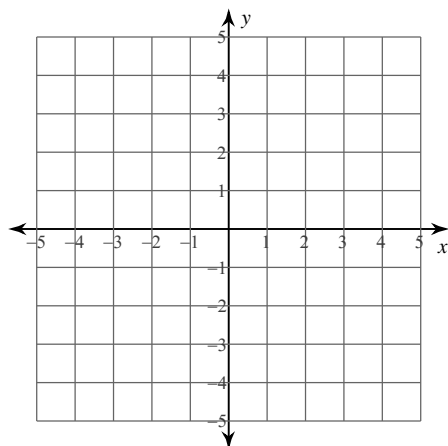
$$2) \ y = 2x + 4$$

$$y = \frac{1}{4}x - 3$$



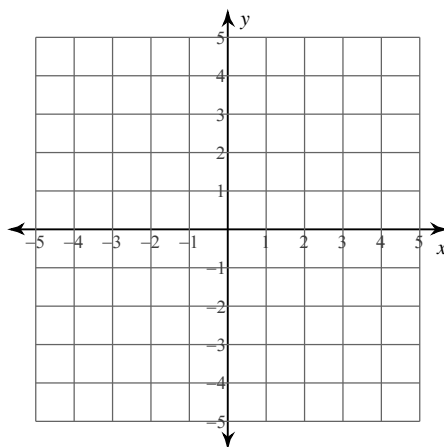
$$3) \ y = x - 2$$

$$y = 5x + 2$$



$$4) \ y = -\frac{5}{2}x + 3$$

$$y = -\frac{5}{2}x + 2$$



Solve each system by elimination.

5) $3x - y = -2$
 $-3x + 9y = -6$

6) $8x - y = 14$
 $-8x + 6y = -4$

7) $3x - 8y = -18$
 $5x + 8y = -30$

8) $x - y = -1$
 $-x - 10y = -10$

9) $2x - 2y = 0$
 $3x + 10y = 26$

10) $-8x - 5y = 10$
 $16x + 9y = -18$

Solve each system by substitution.

11) $y = -2x - 8$
 $5x + 4y = -11$

12) $y = -4x - 1$
 $8x + 2y = -4$

$$\begin{aligned} 13) \quad & y = -2x + 9 \\ & -x + 6y = 2 \end{aligned}$$

$$\begin{aligned} 14) \quad & y = 3x \\ & -2x - 2y = 0 \end{aligned}$$

$$\begin{aligned} 15) \quad & -3x - y = -23 \\ & -5x + y = -17 \end{aligned}$$

$$\begin{aligned} 16) \quad & 7x - y = -23 \\ & -7x + y = 23 \end{aligned}$$

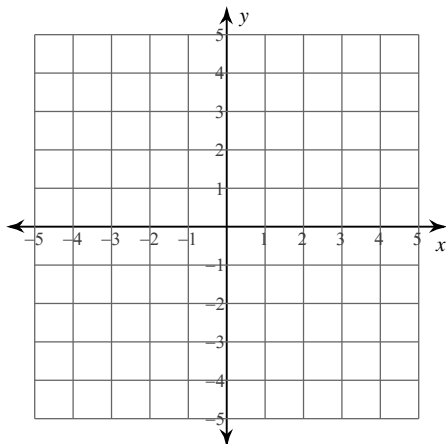
- 17) DeShawn and Eduardo each improved their yards by planting hostas and ivy. They bought their supplies from the same store. DeShawn spent \$82 on 9 hostas and 8 pots of ivy. Eduardo spent \$50 on 9 hostas and 4 pots of ivy. Find the cost of one hosta and the cost of one pot of ivy.

- 18) Eduardo and Julia are selling fruit for a school fundraiser. Customers can buy small boxes of oranges and large boxes of oranges. Eduardo sold 10 small boxes of oranges and 7 large boxes of oranges for a total of \$167. Julia sold 5 small boxes of oranges and 7 large boxes of oranges for a total of \$122. Find the cost each of one small box of oranges and one large box of oranges.

- 19) The school that Jenny goes to is selling tickets to a choral performance. On the first day of ticket sales the school sold 4 senior citizen tickets and 14 student tickets for a total of \$140. The school took in \$168 on the second day by selling 9 senior citizen tickets and 7 student tickets. Find the price of a senior citizen ticket and the price of a student ticket.

Sketch the solution to each system of inequalities.

20) $y \leq 3x - 2$
 $y > -x + 2$



21) $y < 6x + 3$
 $y \geq x - 2$

